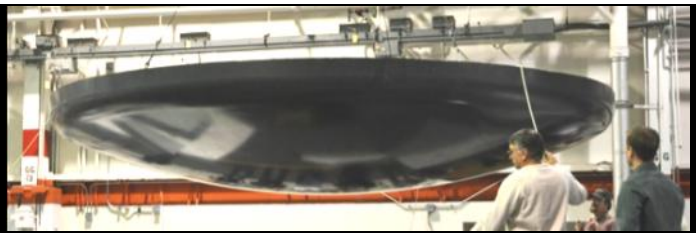
ORION
CREW EXPLORATION VEHICLE

WEEKLY ACCOMPLISHMENTS



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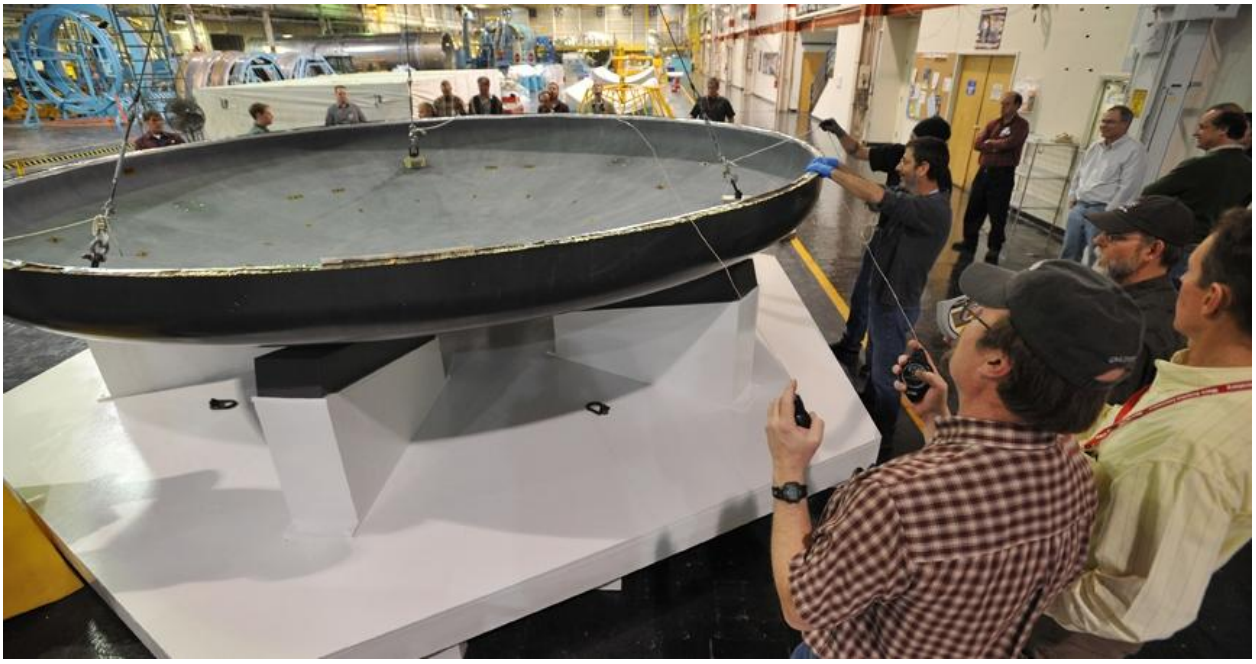

The Orion thermal protection system team achieved a major technology milestone by completing fabrication of the world's largest heat shield structure. The five meter shield (shown above and in banner) was pulled from its layup mold at Lockheed Martin's composite development facility in Denver, Colo. The shield was fabricated with a cutting edge high-temperature composite material system developed by Lockheed Martin in partnership with Tencate Advanced Composites, a leading supplier of aerospace thermoset and thermoplastic prepregs. TenCate's composite materials are used in commercial aircraft, radomes, satellites, general aviation, oil & gas, medical and high-end industrial applications.structure.

Integration of the Attitude Control Motor (ACM) to the Launch Abort System (LAS shown left) has begun at White Sands Missile Range (WSMR) in support of Pad Abort-1 (PA-1). Once the hardware integration is complete, the WSMR team will focus on the Soft Mate tests which will test the integration of the electronics for the entire PA-1 Launch Abort System.

Fabrication of the Service Module (SM) Ground Test Article (GTA) Test Panels has begun. The SM GTA Avionics Ring Test Panel (shown left) is just one of a series of panels that will be put through a variety of tests that will provide data to understand load carrying capabilities and damage tolerance for future flight ready Service Module hardware.

Strain Gauge installation activity on the barrel segment (shown below) of the Ground Test Article has been completed at the Michoud Assembly Facility in New Orleans, Louisiana. A total of 70 gauges have been installed on the barrel article, which will be used in support of the proof testing later this year. The barrel will next move to the welding tool where it will be mated with the cone article.